

Date: Mon, 1 Mar 93 22:40:33 PST  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #275  
To: Info-Hams

Info-Hams Digest Mon, 1 Mar 93 Volume 93 : Issue 275

## Today's Topics:

## 2m Beam

## ADVICE ON MOBILE RIG IN F

## For sale: interesting rf device for experimentation, or parts IC-W21AT - an opinion

## Info Request on Antenna > AS-1887A/PRC-74

Info wanted on HP 1707B scope

## OSL HELP PLEASE

R-648/ARR-41 info needed

## STRAIGHT KEYS

Wanted: C band feedhorn

## Where to buy Litz wire

as you 5200 information needed

Yet Another License Datapoint...

Get another license datapoint...

Send Replies or notes for publication to: <INIO-Harms@UCSD.Edu>  
Send subscription requests to: <Info\_Harm REQUEST@UCSD.Edu>

Send subscription requests to: <Info-Hams-REQUEST@UCSD.EDU>  
Problems or comments about the interface should be directed to:

Problems you can't solve otherwise to [brian@ucsd.edu](mailto:brian@ucsd.edu).

Archives of past issues of the Info-Hams Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

Date: 1 Mar 93 18:55:40 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: 2m Beam  
To: info-hams@ucsd.edu

>  
> If you have an old multi-element TV antenna, you can prune it to 2  
> meters. I measured 9 dBd on my 6' 5-element job. I used a plan out of  
> Ham Radio (snif), and added a gamma match made from aluminum/plastic  
> tubing purchased at a hobby shop. The whole thing took a couple

> weekends because I had to design the gamma match hardware.  
>  
> Yagis are not mysterious. Just resonate the driven element on the boom,  
> then cut the reflector +5% and the directors -5%. Then rematch the DE  
> with a gamma, hairpin, or other match of your choice. If you want the  
> bandwidth to be wider, use larger-diameter elements.  
>  
Everyone seems in agreement that larger diameter elements give wider  
bandwidth, yet when I tried playing with the Yagimax program that is  
floating around the net, it seems to indicate the opposite, at least in terms  
of SWR (the gain and F/B are less definitive). I wanted to try mininec on  
the same examples, but it is not very user friendly. I guess I shouldn't  
expect much out of these antenna design programs, but I was hoping at  
least for indications in the right direction. I assume that I must be doing  
something wrong. Should I not be using SWR as a criteria for bandwidth?  
Is there a DOC file explaining how to use mininec (I have seen a help file  
which describes how to input the data for a simple dipole, but it doesn't  
go into multi-element antennas, and doesn't explain how to handle different  
feed arrangements. I also don't understand the vert/horiz/combined components  
in the output)? Anyway, I too am trying to put together a Yagi, but have had  
a hard time trying to find tubing of the recommended diameter, and was  
hoping to find out how the results would change with different size tubing.  
Also, is there a rule of thumb for spacing of gamma and "T" matches,  
relative to tubing size? One old timer told me to look up the charts  
relating spacing and wire diameter to impedance, for such things as twin lead  
etc., and find where the curve indicates 300 ohm (this was actually for a  
J-POLE design). Is this correct (it would seem to be the way J-poles are  
designed at least, since some are made from 300 ohm twinlead, and the 1/2"  
pipe version seems to approximate 300 ohms as well), and if so where does the  
300 ohms come from, and is this different for different types of antennas?  
Is the spacing in a T-match or gamma match obtained in the same way?  
Sorry for the number of questions, but I figured it was better than 10  
separate posts.

One additional unrelated question. How important is it to have a true  
ground, when using a J-POLE antenna? I run my 2-meter packet rig off  
a car battery, and the system is not grounded anywhere, except perhaps  
at the computer (since even the TNC runs off an isolated transformer).  
How much would grounding help performance, and where should the system  
be grounded, at the antenna or at the transmitter, or both?

Thanks in advance. 73 B.J. N3JLQ

---

Date: 28 Feb 93 11:49:00 GMT  
From: agate!howland.reston.ans.net!gatech!destroyer!iunet!

hal9k!.phillip.laird@ames.arpa  
Subject: ADVICE ON MOBILE RIG IN F  
To: info-hams@ucsd.edu

>I'm seriously considering buying a Ford Ranger and want to install a UH  
>radio in it. I'd be interested to hear from anyone who is using VHF or  
>rigs in a Ranger. Power output will be about 25 watts and I'll probably  
>use a permanent roof-mounted antenna. I'm mainly interested in advice o  
>mounting locations, power & antenna cable routing, noise problems,  
>on-board computer problems, etc.

>

>Thanks & 73....

>

>Mark AA7TA

I have used three different radio types in the '91 Ranger I own. None  
of the radios were represented with on-board electronics problems. I  
always mounted a 5/8 wave in the center of the top of the cab. It works  
very well with Alinco DR110/112, Kenwood TM241, Kenwood 751. I did not  
notice any interference. However, I did mount a Uniden HR2510 and  
placed the 1/4 wave antenna at the front of the bed with a spring and got  
some cross- interference from the 2 meter side. It sounds like an  
oscillation of some type. It is only noticeable every 100 KC's. These  
are the only problems I have seen.

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always mounted a 5/8 wave in the center of the top of the cab. It works  
very well with Alinco DR110/112, Kenwood TM241, Kenwood 751. I did not  
notice any interference. However, I did mount a Uniden HR2510 and  
placed the 1/4 wave antenna at the front [1;35;40m those persons whom are only 18  
years of age or older. These conferences [0m

[1;35;40m are:

[0m

[1;35;40m

[0m

[1;35;40m \*REC.HUMOR

[0m

[1;35;40m \*REC.HUMOR.FUNNY

[0m

[1;35;40m \*SPEAK\_UP ANONYMOUS h ground is required. At VHF you can  
make

quick portable antennas like this by simply rolling back a quarterwave  
section of braid from a piece of coax. The inner becomes the monopole

(continued next message....)

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. CNet 1.21 . The HAM Connection BBS, 409-833-1795 14.4K Hayes V.32BIS/V.42BIS

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| HAL 9000 BBS +1 313 663 4173 or 663 3959 | Four 14.4k v.32bis dial-ins |  
| Public Access QWK-to-Usenet gateway | With PCBoard 14.5aM & uuPCB |  
+-----+-----+-----+-----+  
| Member of EFF, ASP, & ASAD | 1.5 Gigabytes Online | Service since 1988 |

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Date: 2 Mar 1993 05:59:15 GMT  
From: usc!howland.reston.ans.net!usenet.ins.cwru.edu!cleveland.Freenet.Edu!  
aj008@network.UCSD.EDU  
Subject: For sale:interresting rf device for experimentation, or parts  
To: info-hams@ucsd.edu

Article 10592 of rec.radio.swap:  
Path: usenet.ins.cwru.edu!cleveland.Freenet.Edu!aj008  
From: aj008@cleveland.Freenet.Edu (Aaron M. Barnes)  
>Newsgroups: rec.radio.swap  
Subject: For Sale:Studioline Stereo II tv stereo adapter  
Date: 2 Mar 1993 05:51:30 GMT  
Organization: Case Western Reserve University, Cleveland, Ohio (USA)  
Lines: 13  
Message-ID: <1musl2INN8ih@usenet.INS.CWRU.Edu>  
NNTP-Posting-Host: slc10.ins.cwru.edu

Hello.

I bought this because it thought it was a tv stereo tuner.  
But it is for use on cable systems to receive hidden audio signal  
s, and I have no use for it.  
It has a nice black metal case, power supply, other RF parts.  
I will sell it for \$20+shipping.

Thank You.

--  
/ / aj008@cleveland.freenet.edu.Huey Lewis and the News  
/ / Upgrading your Mcintosh or Impotent Business  
\ \ / Machine? Don't bother. Upgrade to an Amiga.  
\ \Amiga-"We Make Computers for the Masses, Not the Classes."

--  
/ / aj008@cleveland.freenet.edu.Huey Lewis and the News  
/ / Upgrading your Mcintosh or Impotent Business  
\ \ / Machine? Don't bother. Upgrade to an Amiga.  
\ \Amiga-"We Make Computers for the Masses, Not the Classes."

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Date: Mon, 1 Mar 1993 21:11:13 GMT  
From: mvb.saic.com!unogate!news.service.uci.edu!usc!howland.reston.ans.net!

bogus.sura.net!darwin.sura.net!sgiblab!a2i!davidj@network.UCSD.EDU  
Subject: IC-W21AT - an opinion  
To: info-hams@ucsd.edu

In <1993Mar1.182939.25686@cbnewse.cb.att.com> k9un@cbnewse.cb.att.com (j.w.ague) writes:

>I was sadly disappointed when I got the chance to really play (and compare)  
>the radio at the store :-(

Did you compare RF performance, other than sensitivity? (sensitivity to i  
intermod,  
selectivity in and out of band, etc? Some of the other Icom attempts  
at wideband receivers haven't been so hot.

> 2) The receiver sensitivity on the out of (ham) band frequencies was  
> considerably less than that of the W2 (at least in the  
> 800MHZ range). Both W21 and W2 antennas were used on both  
> radios in the test.

Any idea how big the difference was?

> 3) The W21 stock antenna is very tightly tuned to the ham bands thus  
> affecting the broadband receiving capabilities. Had I bought  
> the W21, I would have bought an extra W2 antenna.

This is probably not a bad idea; since the PRO-30 days we've learned to  
carry around several different antennas to make things work nicely.

>For me, this radio (W21) did not pan out as I had hoped. I am now a happy  
>owner of a W2. ICOM needs to address the receive audio problem for sure.  
>On the positive side, ICOM has gone back to supporting the "standard" ICOM  
>speaker mic accessories on the W21. I never did understand why they went  
>to the new configuration on the W2! I suppose there are some people who  
>like separating the audio from the 2 receivers. It seems that they could  
>have provided that capability without changing the basic configuration.

>Wes Ague - k9un

Hope we can get some more info from your comparison, as the 21 hasn't made  
it to all the stores yet.

73 David Josephson WA6NMF

--  
David Josephson <davidj@rahul.net>

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Date: Mon, 1 Mar 1993 22:39:32 GMT  
From: mvb.saic.com!unogate!news.service.uci.edu!usc!howland.reston.ans.net!  
bogus.sura.net!darwin.sura.net!mlb.semi.harris.com!spuds.mlb.semi.harris.com!  
rliles@network.UCSD.EDU  
Subject: Info Request on Antenna > AS-1887A/PRC-74  
To: info-hams@ucsd.edu

I have acquired a portable, field antenna for use between 3-18MHz. The antenna was manufactured ~1987 by Hughes Aircraft Co. I would like to have the spec sheet or at least the power rating for the antenna.

This is the marking info:

ANTENNA  
AS-1887A/PRC-74  
HUGHES AIRCRAFT CO.  
P/N 1550159-100 US

If there is anyone with access to the specs or can point me in the right direction, I'd appreciate it.

Ray

---

\ \ \ \ | Harris Semiconductor  
 \--\--\ | Mail Stop 58-032  
 \ \ \ | P.O. Box 883  
 | WA4VME | Melbourne, Florida 32902  
 | Ray H. Liles | 407-729-4640 (Office)  
 | rliles@heimdall.mlb.semi.harris.com | 407-729-4029 (FAX)

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Date: 1 Mar 93 22:58:46 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Info wanted on HP 1707B scope  
To: info-hams@ucsd.edu

I'm looking at buying a HP 1707B. Does anybody know the specs of this device? How old is it? Any estimate how much its worth?

Mail replies to me please.

72  
Kevin Purcell N7WIM / G8UDP  
a-kevinp@microsoft.com

"We conjure the spirits of the computer with our spells"

-----  
Date: 28 Feb 93 12:18:00 GMT  
From: agate!howland.reston.ans.net!gatech!destroyer!iunet!  
hal9k!.phillip.laird@ames.arpa  
Subject: QSL HELP PLEASE  
To: info-hams@ucsd.edu

>CT1DRE wants me to QSL direct, but I don't have access to  
>a Foreign Callbook, could someone help me out please?  
>  
>Alsoe does anyone have QSL information for the following  
>V31RL (can't use ARRL Outgoing)  
>LY2ZZ  
>S57EK

CT1DRE: Sebastiao Luis F Ferriera, Rua Joao Deus 400 1-E, Tires  
P-2775 Parede Portugal

V31RL: No information in 1992 Callbook- Belize - Call not listed

LY2ZZ: Radio Club, Box 71 235400 Shauliai Bulgaria

S57EK: No Information in 1992 Callbook

You might drop the ARRL a line asking where S57 is located, I don't at  
this time know.

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. CNet 1.21 . The HAM Connection BBS, 409-833-1795 14.4K Hayes V.32BIS/V.42BIS

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| HAL 9000 BBS +1 313 663 4173 or 663 3959 | Four 14.4k v.32bis dial-ins |  
| Public Access QWK-to-Usenet gateway | With PCBoard 14.5aM & uuPCB |  
+-----+-----+-----+-----+  
| Member of EFF, ASP, & ASAD | 1.5 Gigabytes Online | Service since 1988 |

-----  
Date: Sat, 20 Feb 1993 14:01:00  
From: haven.umd.edu!darwin.sura.net!sgiblab!munnari.oz.au!jabaru.cec.edu.au!  
csource!gateway@ames.arpa  
Subject: R-648/ARR-41 info needed  
To: info-hams@ucsd.edu

> Does anyone have any experience with the R-648/ARR-41?  
> These have been in stock with Fair Radio sales for a number of  
> years, and they go for \$195 checked.

Yes sir, I had me one of these, back a spell.

>

> The radio is described as an airborne HF receiver, 190-550 khz and  
> 2-25 Mhz coverage. It has digital-mechanical tuning and mechanical  
> filters for 1.4 and 9.4 Khz. Requires 24V at 4A, and weighs 35 lbs.

>

> Is this a mini R-390 or just another boat anchor? What is the vintage?

Well to start with, they use a dynamotor this produces the HT it is NOISY so  
right off, you will need a P/su. It is very basic and is older than the R390  
and

if my memory serves me correct ( an't been so good lately ) early 50's

> What company made this pig(let).

Fair still listed it in their 1992 catalog

>

I reckon the R392/URR is better more modern 60's but the R-648/ARR-41 is not  
bad

it also uses a pto with dual conversion. The first conversion uses a xtal osc  
only does

am/cw, cw gives you the 1.4khz filter and am the 9.4khz too wide.

> Worth tinkering with?

Yes if you have spare tubes.

Leroy.

BTW if you are into surplus military radio's let me know, I wouldn't mind jawin  
with you again  
some time.

---  
X KWQ/2 1.0C X "Beam me up Scotty, there is no intelligent life here"

\* Origin: Biz-Nice! S.Oz Business BBS! 4 Lines 08-269 7029/7809 (3:800/851)

-----  
Date: 28 Feb 93 11:39:00 GMT

From: dog.ee.lbl.gov!hellgate.utah.edu!caen!spool.mu.edu!yale.edu!  
newsserver.jvnc.net!howland.reston.ans.net!gatech!destroyer!iunet!  
hal9k!.phillip.laird@network.UCSD.EDU

Subject: STRAIGHT KEYS

To: info-hams@ucsd.edu

> >I remember seeing a straight key kit that was really

> >well made at a ham fest.. think it might have been  
> >something like a Kent.. does anyone have any idea  
> >what it might be.  
> >  
> >thanks and 73s  
> >Jeff, AC4HF

>Kent Engineers in the UK. They make a really nice solid key. Similar  
>to the old British Post Office 610 key. (Much better than the standard  
>in my opinion). In the US, Palomar Engineers in CA sell them (about \$10  
>I think). Pricy, but nothing around comes close to the quality or feel.

At the Orange, Texas HAM-FEST, a vendor sold these in the bug, paddle  
and straight key variety. Looking at these items, a person could easily  
see how well constructed they are. But, none were \$100.00 US. All of  
these were priced lower and also carried the description 'Kit'. I'll  
try to see if anyone from the Orange, Texas ARC can tell me who the  
vendor was and his address if anyone is interested.  
eers in CA sell them (about \$10>I think). Pricy, but nothing around comes close  
to+' .+".+..+..+..+~.+p.+h.+\_.+R.+J.  
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. CNet 1.21 . The HAM Connection BBS, 409-833-1795 14.4K Hayes V.32BIS/V.42BIS

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| HAL 9000 BBS +1 313 663 4173 or 663 3959 | Four 14.4k v.32bis dial-ins |  
| Public Access QWK-to-Usenet gateway | With PCBoard 14.5aM & uuPCB |  
+-----+-----+-----+-----+-----+  
| Member of EFF, ASP, & ASAD | 1.5 Gigabytes Online | Service since 1988 |

-----  
Date: 2 Mar 1993 05:58:38 GMT  
From: sdd.hp.com!swrinde!gatech!usenet.ins.cwru.edu!cleveland.Freenet.Edu!  
aj008@network.UCSD.EDU  
Subject: Wanted: C band feedhorn  
To: info-hams@ucsd.edu

Hello.  
I need a used, functional C band feedhorn.  
Please let me know if you can help me out.  
Thank You.

--  
/ / aj008@cleveland.freenet.edu.Huey Lewis and the News  
/ / Upgrading your Mcintosh or Impotent Business  
\ \ / Machine? Don't bother. Upgrade to an Amiga.  
\ \Amiga-"We Make Computers for the Masses, Not the Classes."

Date: 1 Mar 1993 22:10:07 GMT  
From: dog.ee.lbl.gov!hellgate.utah.edu!cs.utexas.edu!swrinde!sdd.hp.com!caen!  
destroyer!fmsrl7!lynx.unm.edu!dns1.NMSU.Edu!dns1.NMSU.Edu!usenet@network.UCSD.EDU  
Subject: Where to buy Litz wire  
To: info-hams@ucsd.edu

richard@gecko.ee.byu.edu (Richard Christensen) writes:

: Can someone tell me where I can buy some  
: Litz wire.

There was some Litz wire for sale on closeout in an old AES catalog I had, but  
I didn't see it in the last edition they put out.

--  
Dan Tasman KB5YMG dtasman@dante.nmsu.edu

-----  
"I think that I shall never see a billboard lovely as a tree  
Indeed, unless the billboards fall, I'll never see a tree at all."  
Ogden Nash

-----  
Date: 1 Mar 93 20:55:19 GMT  
From: ogicse!news.tek.com!tekgen!countach.pen.tek.com@network.UCSD.EDU  
Subject: Yeasu 5200 information needed  
To: info-hams@ucsd.edu

Hello Netland!

I am thinking about buying a Yeasu 5200 dual-bander. I have been out of the  
loop when it comes to these types of radios since I have been using  
Motorola Micors/Mitreks for the past ten years..so bear with me.  
(If you want to know why the sudden change; new car, less space, more features).

On the 5200 microphone, there is a 'P' key. I have no idea what this is for.  
It is not in the user's manual. A couple of friends have this radio and have  
no clue what the button does. The local Yeasu stocked store couldn't really  
give me a good answer. Anybody got any ideas?

Also, while on the subject, anybody have info on how to do the out-of-band  
mods?

Please e-mail any responses.

Thanks in advance,

John Hammond  
WB70DP

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Date: Mon, 1 Mar 93 21:01:24 GMT  
From: qualcom.qualcomm.com!walter!porthos!dancer!whs70@network.UCSD.EDU  
Subject: Yet Another License Datapoint...  
To: info-hams@ucsd.edu

In article <1993Mar1.190710.3344@CSD-NewsHost.Stanford.EDU>  
paulf@umunhum.stanford.edu (Paul Flaherty) writes:  
>Passed my Extra on 12/19/92; got the real piece of paper on 2/22/93.  
>=Paul Flaherty, N9FZX | "We are meant to be masters of destiny, not victims

Ditto, upgraded to general on 12/19/92 and received the paper on  
Saturday 2/28. About 10 weeks.

Bill K2UNK

---

Date: Tue, 2 Mar 93 00:02:19 GMT  
From: btree!bly@network.UCSD.EDU  
To: info-hams@ucsd.edu

References <Pine.3.05.9302151902.A5630-a100000@uafhp.uark.edu>,  
<1993Feb17.153513.18447@cabot.balltown.cma.COM>, <1m3ooqINNatl@mojo.eng.umd.edu>  
Subject : Re: Cellular Safety

In article <1m3ooqINNatl@mojo.eng.umd.edu> chuck@eng.umd.edu (Chuck Harris - WA3UQV) writes:  
>In article <1993Feb17.153513.18447@cabot.balltown.cma.COM>  
perley@cabot.balltown.cma.COM (Don Perley) writes:  
>>In article <Pine.3.05.9302151902.A5630-a100000@uafhp.uark.edu> Peter Laws  
<plaws@uafhp.uark.edu> writes:  
>  
>]]Another nit to pick: cell phones transmit all the time while the other 2  
>]]types of radio listed are intermittent. Some kind of time measurement  
>]]should be listed to make the figures listed more useful (ie. W/kg/s).  
>  
>]on the plus side, cell phones will automatically cut the power back  
>]when it's not needed. You can reduce your exposure just by calling  
>]from good locations.  
>  
>Yes, but when the power absorbed by your head makes the signal too weak

>for the cell to hear, the cell will tell your radio to turn up its power.  
>  
>900 Mhz really has no business being near your head,...or vice versa.  
>

I recommend the Mitsubishi 22X (7 ounce pocketphone) to any heavy cellphone user as I believe it is one of the safest. When in battery conserve mode, it reduces the power as much as possible. You can program the display to show you receive signal strength and xmit power. It really does reduce power below the .6w often. It also can be programmed to xmit only when you are talking (VOX).

All the medical stuff I've read says its probably not a health risk at 800-900Mhz other than RF heating to the scalp, but I try to keep usage to a minimum and do all the long-winded stuff on a wire-phone or in the car. The 22X drops into a car mount and then allows hands-free and handset operation at a full 3w to external ant.

Also with this cellphone and several other pocket models I've seen, you can turn the handset volume all the way up, and hold the phone like a handi-talki or lay the phone on a table and use it like a speaker phone. This gets the RF away from your body.

The user's manual for my 22X pocket cellphone suggests using the phone with the antenna pulled out and holding the phone horizontally across your face as you would a normal phone handset. If held correctly, the 3" antenna will extend out radially from your head at a distance of several inches. I notice no difference in communications quality when the antenna is held horizontally vs. vertically (slight signal loss when the antenna is pushed back into the phone).

If I hold the phone incorrectly with antenna touching or almost touching the side of my head, I do notice RF heating on my scalp and sometimes headaches after extended use.

COST: \$650 22X cellphone w/ batt  
\$600 car mount, hands-free kit, 3w amp, car ant, etc.  
\$35 extra battery; after-market; large: 2.4 hrs talk;  
24 hr stdby

Waiting for Qualcomm CDMA low-power spread-spectrum cellular, Then this shouldn't be an issue.

Roger Bly  
Brooktree Corp  
bly%btree@ucsd.edu

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Date: Tue, 2 Mar 1993 03:39:34 GMT  
From: esseye!jongsma@uunet.uu.net  
To: info-hams@ucsd.edu

References <darknite.730869070@camelot>, <laird.730875415@pasture.ecn.purdue.edu>, <1993Mar1.025618.9392@netcom.com>  
Reply-To : jongsma@esseye.si.com  
Subject : Re: Info needed on GPS

There seems to be a great deal of interest in GPS on this newsgroup. I'd like to take the opportunity to plug the GPS Digest, a moderated mailing list that I co-moderate.

The GPS Digest was formed last year for just such discussions. It has a subscriber list of well over 100 readers and is a good source (IMHO) of data on GPS activities.

Requests for submissions should be made to [gps-request@tws4.si.com](mailto:gps-request@tws4.si.com) (note that this is not an automated service. It ends up in my mailbox, so those of you used to listserv need to be patient. As soon as I return from a business trip, I'll process your request.)

Currently, we try to limit issues to every one or two weeks. No sense in flooding mailboxes with more fluff! This depends on submissions of course...

Ken

--

Ken Jongsma  
Smiths Industries  
Grand Rapids, Michigan [jongsma@benzie.si.com](mailto:jongsma@benzie.si.com)  
[73115.1041@compuserve.com](mailto:73115.1041@compuserve.com)

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End of Info-Hams Digest V93 #275  
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